

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

LIEUT.-GEN. A. PHELPS,
23, AUGUSTUS ROAD.

GLOUCESTER

Urban Sanitary Authority,

FOR 1884.

Presented to the Sanitary Committee of that Body at the
Meeting held February 13, 1885, and Ordered
to be Printed.

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REPORT.

MR. MAYOR AND GENTLEMEN,—

I have the honour to present you my Report for the year 1884, as Medical Officer of Health to the Gloucester Urban Sanitary District.

The population of the District has somewhat increased during the past year. The number of deaths (registered) was 675, of births 1231. The number of houses erected during the year was 96. The present population may therefore be arrived at in the following manner—

Estimated population at close of 1883	...	38,433
Excess of births over deaths in 1884	...	556
96 houses erected in 1884, allowing 4 inhabitants to each house	... ..	384
		<hr/>
		39,373
		<hr/>

The death-rate for the year will therefore be 17·2.

It will be seen by reference to the Monthly Health Bulletin, at the end of this Report, that there has been a considerable fluctuation in the cases of Zymotic Disease. Deaths from Measles in 1883, numbered 5; in 1884, 22. From Scarlet Fever, in 1883, 36; in 1884, 5. Enteric Fever, 10 in 1883; and 8 in 1884. Deaths from this last-named disease do not represent the number of persons attacked, and to the causes of these cases I shall refer later in this Report.

I have continued to take the same precautions, as heretofore, for the discovery and prevention of the spread of disease. With the assistance of Mr. Allen I have endeavoured to discover all likely

sources of mischief, by investigating the condition of the house drains, traps in houses, and other points connected with the sanitary condition of the District. During the months of August, September, October, November, and December, cases of Enteric Fever were reported to me, some of them having been received into the Infirmary, and others of which I had cognisance from other sources. I carefully investigated every case, and I found that at only three houses, which had a proper supply of the City water, had this disease appeared. I could not trace any cause for the appearance of the complaint in some of the cases, but I feel compelled to state that more than one of them, in my opinion, were caused by the escape of sewer gas through the ventilators. These cases to which I am now referring occurred in parts of the district, where in consequence of the house drains being connected with the old sewers, which cannot properly be flushed, and which are constantly full of stagnant sewage matter, the formation of gas and its escape at the nearest ventilator is constantly going on. The dryness and warmth of the season no doubt facilitated the formation of this product of decomposition. The works which are about to be commenced, with the object of connecting all houses in those parts of the district, directly with the City system of sewers, will probably do away with some of the causes of Enteric Fever.

In order that every house drain may be properly flushed, it is necessary that every closet should be furnished with a flushing-box. The danger of sewage is in proportion to its stagnation. If it is carried away before time is allowed for putrefaction, the danger is reduced to a minimum. I am informed by Mr. Read that there are at the present time 2653 houses in the district which have no flushing-boxes to the water closets.

I have no desire to create unnecessary alarm, but I am bound to call attention to the more than probability of a visitation of Cholera to our City during the present year. The Sanitary

Authority is making preparations for the prevention of the spread of that disease, carrying out rapidly the sewerage works in the South end district, and the connection of house drains with the City system of sewers. But it is the duty of the owners of houses to supplement the efforts of the Authority by attending to the condition of their properties. Each closet ought to be provided with a flushing-box, not only for the purpose of removing soil from the house, but also to keep it properly moving when it has reached the sewers. However perfectly sewers are constructed, it is necessary to supply constantly the motive power of water from flushing-boxes to prevent stagnation in them, and this it is clearly the duty of the house owner to provide, not only for his own sake, but as one which he owes to the community.

In order that a sufficient supply for this purpose shall be provided, every house ought to be connected with the City water system. There are at the present time 1441 houses deriving their sole supply from pumps and wells, and none of them have flushing-boxes. There are 6535 houses connected with the City sewers, and although there is always an undertaking given to take City water, when permission is granted to connect with City sewers, there are only 6006 supplied with City water, in addition to 200 supplied with water from Hempstead. From these figures it is evident that there have been 329 houses connected with the sewers, which have only a pump supply, and in addition to these it will be seen that there must be a large number of owners who have complied with the letter of the undertaking, but have not carried out a most important part of it. The reason why this arrangement is insisted on is for the purpose of securing adequate flushing of the drains, for the reason which I have already given. All owners of houses to be hereafter erected will be compelled by the new Bye Laws to secure complete flushing of the closets and drains.

As long ago as the year 1877 I called attention to the necessity

of obtaining an additional water supply, and one important reason for my doing so was this, that I was aware of the advantage of connecting every house with the City system, not only for drinking purposes, but for carrying out the proper cleansing of the drains, and through them of keeping the contents of the sewers in constant movement towards their outlet. I then knew that if the water was taken by every house and properly used, the supply would not be adequate to meet the demands.

By the adoption of a system of water meters such a saving has been effected, that there would be no deficiency, even with such a dry summer as that of 1884, if every house is connected and each house supplied with a flushing-box. By the kindness of Mr. Read (to whom I must express my obligation for many figures given in this Report) I am enabled to give the following details. The City is divided into twenty districts, and each district is supplied through a waste water meter, of which the first was fixed Oct. 12, 1883, and the last on Feb. 20, 1884. There were stop-taps fixed on all service pipes, and 100 extra valves on mains by the end of May, 1884. The result obtained by these means will be seen by a comparison of the following figures.

The consumption of water, Oct. 12, 1883, was 947,000 galls.

„ „ Dec. 29, 1884, „ 478,000 „

Daily saving 469,000 „

Or, in round figures, but little less than half that which was used and wasted before the meters were applied.

If the use of water for flushing purposes is a necessity, the use of unpolluted water for drinking purposes is still more important. Certain diseases, of which Cholera and Enteric Fever may be considered as types, are mainly spread by means of the use of contaminated water. It is a matter on which medical men hold different opinions, whether either of these diseases can be produced by polluted water without the specific poison of the disease. But there is no fact in medicine more demonstrable than that both of

them are spread by the use of polluted water, and there can be no security when once either of these diseases appears (and other diseases may be placed in the same category) that surface wells, that is, those whose depth does not exceed from 20 to 30 feet, will not become contaminated. The wells in Gloucester, with less than a dozen exceptions, are all surface wells. Dr. Wilson, one of the most eminent authorities on Hygiene, writes "In towns and villages provided with a public water supply, the closing of all surface wells, whether public or private, should be rendered compulsory; for, with drains ramifying in every direction, it may be taken for granted that they are either polluted, or are at all events constantly liable to pollution." These remarks are peculiarly applicable to some parts of our City, where old leaking drains have been for years pouring out their pollutions into the bed of gravel whence the well supply is taken. I have examined the water from hundreds of wells, and I do not think I have found a dozen in Gloucester free from old or fresh contamination. I have already mentioned that there are 1441 houses deriving their sole supply from pumps. Every one of these ought to be immediately connected with the City water system.

The work is already commenced of changing the connection of 1112 houses, at present emptying into old and imperfect sewers, by discharging them into the new sewers of the City system. When this is completed, if these alterations, which I have named, in the water supply and service to the houses are effected, I shall entertain but little fear of the spread of Cholera, if it arrives in our midst, but I may with confidence predict that the more time is wasted before such sanitary work as I have pointed out is commenced, the greater will be our risk and the larger will be the number of victims to the epidemic. And what I have said about Cholera is also true about enteric fever. We may consider that this latter is a disease over which we have almost absolute control. We may not be able to stop the occurrence of sporadic

cases, but we believe that with sanitary conditions in anything approaching a perfect state of arrangement, the danger of its spreading is reduced to a minimum.

In recapitulation, then, I would say that the following are the principal points to which immediate attention should be given :—

- 1.—The connection of every house in the district with the City water system, and securing a flushing-box for every w.c. provided with water from the City mains.
- 2.—The connection of every house by means of drains with the City sewers.*

The new Bye Laws recently adopted by the Authority will secure compliance with these arrangements in all houses to be hereafter erected, and I am happy to be able to state that there are other important sanitary matters included in them ; amongst others, I may mention the provisions made for the ventilation of drains, another point of great importance in making healthy houses.

Hospital for Infectious Diseases.—Early in last year I received into the Hospital in the Stroud Road three cases of Scarlet Fever. As I stated in my last Report, the Hospital had become dilapidated, and it was determined to make alterations in it. I regret that the suggestions which I offered for the purpose of making it efficient for the reception and treatment of cases of two infectious diseases at the same time were not adopted by the Authority, and that I was not allowed any opportunity of pointing out deficiencies which were evident on the plan of the building. I cannot but believe that a considerable waste of money has been incurred in the alteration of a building which is entirely inadequate for the purpose for which it is supposed to be erected. It is impossible in it to treat with safety two kinds of infectious diseases at the same time, as there are no means of isolating patients recovering

* The *closure* of wells is also of importance, as when they are open there is always a risk of the water from them being drunk.

from one kind of disease from the danger of becoming infected with the second complaint. There are no means of checking the spread of infection from ward to ward, and the doors of the two nurses' rooms, into which the wards open, are only 9 inches apart. Isolation is therefore impossible, and I could not undertake the responsibility of receiving patients with two different infectious diseases at the same time.

Although the Surveyor, Mr. Read, has undoubtedly made the very best arrangements which were compatible with the instructions which he received, I regret to say that there are other structural deficiencies besides the want of means of separating patients.

The ventilation of the wards is most imperfect, and it is impossible to remedy the defect, because, as the wards are placed back to back with a wall between them, through ventilation is impossible. Hospital wards ought to be so constructed that the air can pass freely through them from window to window,* and

* In corroboration of this statement I give the following authorities. "The best arrangements for natural ventilation for hospitals appear to me to be these : 1st, *Opposite windows*, reaching nearly to the ceiling, on the sides of a ward, and a large end window. 2nd, Additional openings, to secure, as far as possible, a vertical movement of the air from below upwards."—"Hygiene," by Prof. Parkes. "The ventilation of each ward should be entirely independent of the others; and to effect this, *cross ventilation by means of open windows*, aided by Sheringham valves, extraction flues, and ventilating fireplaces, is deemed to be most efficient. The windows should reach from within two feet or two feet six inches from the floor to within one foot from the ceiling."—"Hygiene," by Dr. Wilson. And lastly, from the Tenth Annual Report of the Local Government Board, on "the use and influence of hospitals for infectious diseases."—"Windows in the *opposite side walls*, whilst affording the principal means of ward ventilation, and constituting indeed the only effectual means by which thoroughly, and in a short time to change the entire ward air, . . . do not however suffice for this purpose."

it is found that in no cases is fresh air more necessary to recovery than in cases of infectious disease; the mortality from such complaints being higher in proportion to the absence of proper ventilation.] The only mode by which at present the wards can be ventilated necessitates the passage of air across the beds, so that if more than one is occupied, at least one of the patients is not able to receive air which has not been respired by another invalid, and thus rendered impure. This is a serious drawback to the complete efficiency of the Hospital, and one which I fear it is impossible to remedy.

The absence of "observation wards" is a great deficiency in a Hospital for infectious diseases. As this term appears to have been misunderstood when a letter which I addressed to the Surveyor on the alterations in the Hospital was read at a meeting of the Authority, I may explain that persons frequently have suspicious symptoms, which may or may not develop into infectious disease. Under these circumstances, it is advisable that they should be removed—isolated, until it is clear what course the case will take, either to manifest an infectious disease, or to subside and the patient get well. Such cases are common. One suspicious case I quoted in my last Report, as having been received into the observation ward in the Delancey Hospital, at Cheltenham, which was a doubtful case of Scarlet Fever, in which the symptoms subsided without that complaint appearing. The first case received into the altered Hospital in Stroud Road was similar. The early symptoms of Scarlet Fever appeared in a child, a patient at the Infirmary. It was obviously necessary to remove the child on the first appearance of the symptoms, and it was sent to the Hospital in the Stroud Road. Fortunately the wards had not been used, and in a few days the patient was discharged without having had Scarlet Fever. If I had then been treating cases of that disease when the child was admitted, I should have been obliged to expose it to infection of a

concentrated character, so that escape from the Scarlet Fever would have been almost impossible.*

In what I have written about the Hospital, and the suggestions I have made with reference to the necessities of attending to the drainage and water supply to the houses in the district, as precautions to be taken against the spread of Cholera, I am supported by the highest medical authority. Early in January, in the present year, Dr. Blaxall, one of the Inspectors of the Local Government Board, accompanied by Dr. Davies, also an Inspector, visited Gloucester for the purpose of enquiring what precautionary steps were being taken by the authorities, and also to make suggestions with reference to the provision of hospitals for the treatment of cases of Cholera, should any unfortunately appear in the Port and City of Gloucester. These gentlemen had an interview with the Mayor, and the Chairman and Vice-Chairman of the Sanitary Committee, and I have embodied their observations on these subjects in a report, which I have presented to the Authority, and which I append to this Report. The Authority have authorized the Sanitary Committee to take steps to carry out the suggestions with reference to provision for Cholera, and negotiations with the Canal Company for a site for the erection, if necessary, of a temporary hospital at Sharpness are almost completed.

But I must call the attention of the Authority to other portions of the report of Dr. Blaxall's observations to the Mayor and the members of the Sanitary Committee. It must be remembered

* Since this Report was presented to the Sanitary Committee, I have received the Report of the Delancey Hospital, for 1884. In it the Medical Officer "begs to call attention to the desirabilities of providing *one more* 'Isolation Ward,' where suspected cases of infectious disease could be detained until definite evidence were afforded of the complaint, for obviously it is unwise to introduce such cases direct into the wards of a Fever Hospital, whilst at the same time sufficient reasons may exist for their isolation until the illness from which they are suffering has sufficiently developed itself."

that the question of hospital accommodation for the City is associated with the duty of providing hospital accommodation for infectious cases, other than Cholera, occurring in the Port Sanitary District. The Port Sanitary Authority had suggested a site for the erection of a hospital at Sharpness. This was visited by the Inspectors with me, and was pronounced by them to be unsuitable. The Local Government Board has the power to insist on the provision of suitable hospital provision for cases of infectious disease amongst sailors in the Port of Gloucester. From what I learnt from Dr. Blaxall, who came especially to report on this subject, he will not in his report signify his approval of the Stroud Road Hospital. He has condemned the site at Sharpness, and I do not see where another can be found in that locality. The suggestions made by Dr. Blaxall, which I have given in my report, presented to the Authority, is that the Urban Sanitary Authority do combine with the Port and Rural Authorities to make a joint sufficient and efficient hospital. It is impossible to disguise the fact that although the old building has been much altered, it is not either sufficient or efficient, and I must ask the Urban Authority to seriously consider what are the best steps to take to make it fulfil the requirements of such a hospital.

I am aware that it may appear ungracious to find so much fault with a newly-erected building on which a considerable sum of money has been spent. I venture to remind the Authority that when, in accordance with instructions from that body, the Surveyor consulted me as to the requirements of a hospital, I wrote him a letter telling him what I considered to be necessary. The building falls far short of what I asked for as a minimum of requirements. I never had an opportunity, although I was prepared to do so, of offering any opinion on the plans, and now the first occasion on which I can record what I believe to be a true expression as to its capabilities, my sense of duty will not permit me to say less than I have on the subject.

Lodging-houses.—The Registered Lodging-houses have all been visited by the Inspector and myself—by day, and more than once by night. I have found nothing to complain of. I am happy to find that in addition to the Common or Registered Lodging-houses, which are principally occupied by travellers, the Authority is acquiring by the new Bye Laws a power of supervision over other Lodging-houses within the district.

Bake-houses and Milk Shops.—These have been inspected also by Mr. Allen and by me. I had reason to suspect that some of the cases of Enteric Fever of which I have spoken were caused by the use of milk polluted by sewage matter. With Dr. Bond I investigated the matter, and we were unable to come to a conclusion that the spread of the disease was due to this cause.

Meat and Fish Markets.—These have been constantly under my supervision, and I have had but little, if any, cause for complaint during the past year.

It is a source of congratulation to me that, as hitherto, I have experienced the greatest courtesy from the Sanitary Committee during the past twelve months. To them my thanks are heartily accorded for the support which they have given me. To Mr. Read also, the Surveyor to the Authority, I am much indebted for valuable assistance, not only for figures to complete this Report, but also for constant help in the discharge of the duties of my office.

I have the honour to remain,

Mr. Mayor and Gentlemen,

Your obedient Servant,

JOHN P. WILTON,

*Medical Officer of Health to the
Gloucester Urban Sanitary Authority.*

TABLE OF BIRTHS

REGISTERED IN THE GLOUCESTER URBAN SANITARY
DISTRICT IN 1884.

	MALES.	FEMALES.
From January 1 to March 31	183.....	158
„ April 1 „ June 30	153.....	142
„ July 1 „ September 30	157.....	140
„ October 1 „ December 31	155.....	143
	648	583 Total 1231

TABLE OF SICKNESS

Amongst Paupers belonging to the Urban District treated by the Medical Officers of the Union ; and of other persons belonging to the District treated as In or Out-Patients at the Gloucester General Infirmary, the Children's Hospital, and at the Hospital for Infectious Diseases.

	PAUPERS.		IN-PATIENTS.		OUT-PATIENTS	
	Under 5 years of age.	Over 5 years of age.	Under 5 years of age.	Over 5 years of age.	Under 5 years of age.	Over 5 years of age.
All cases of Sickness & Disease	209	899	69	524	899	2605
Measles	71	27	...	...	28	2
Chicken Pox	2	2	...	...	...	...
Scarlet Fever	7	18	...	3	1	2
Croup ... ..	...	...	2	1	...	...
Hooping Cough	6	4	...	1	50	9
Enteric Fever ... ..	...	3	3	37	1	1
Other Forms of Fever ... ..	...	16	1	3	44	19
Diarrhoea	18	44	...	2	89	12
Rheumatic Fever ... ..	...	2	...	10	...	...
Erysipelas ... ..	...	12	...	1	...	2
Phthisis .. ..	...	13	...	26	5	51
Bronchitis, Pneumonia, and Pleurisy	41	112	2	24	36	48
Heart Disease ... ..	...	8	1	13	...	2
Injuries	1	23	9	99	78	737
Other Diseases	63	615	51	304	567	1720

TABLE OF DEATHS

WITHIN THE URBAN SANITARY DISTRICT OF GLOUCESTER IN 1884.

CAUSES OF DEATH.				AGES AT DEATH.							SEXES.		
				Under 1	1 and under 5	5 and under 20	20 and under 40	40 and under 60	60 and under 80	Over 80	Males	Fem.	Total.
Class 1.													
Order 1.—MIASMATIC				28	40	14	9	2	3	...	52	44	96
Scarlet Fever	...	...	...	...	3	2	...	...	...	...	2	3	5
Hooping Cough	...	...	...	6	7	...	...	...	...	...	5	8	13
Croup	...	...	...	...	6	4	...	...	...	...	5	5	10
Measles	...	...	...	3	19	...	...	...	...	...	14	8	22
Continued	Enteric Fever			...	...	3	4	1	...	...	4	4	8
	Other or Doubtful			...	...	2	2	...	...	...	2	2	4
Diarrhœa	...	...	...	16	5	...	1	...	...	...	13	9	22
Erysipelas	...	...	...	2	...	...	...	1	1	..	3	1	4
Vaccination	...	...	...	1	...	...	...	..	...	...	...	1	1
Puerperal Fever	...	...	...	...	...	1	2	...	...	...	...	3	3
Rheumatism	...	...	...	...	...	1	...	...	1	...	2	...	2
Gout	...	...	...	...	...	...	...	...	1	...	1	...	1
Septicœmia	...	...	...	...	...	1	..	...	...	...	1	...	1
Order 2.—ENTHETIC				7	1	...	1	...	...	...	4	5	9
Syphilis	...	...	...	7	1	...	1	...	...	...	4	5	9
Class 2.—Constitutional Diseases.													
Order 1.—DIATHETIC				...	...	1	7	10	10	3	13	18	31
Anæmia	...	...	...	...	..	...	...	1	...	...	...	1	1
Dropsy	...	...	...	...	...	...	2	...	1	1	1	3	4
Cancer	...	...	...	...	...	..	5	9	6	2	8	14	22
Gangrene	...	...	...	...	...	..	...	...	3	...	3	...	3
Lupus	...	...	...	...	..	1	...	...	...	...	1	...	1
Order 2.—TUBERCULAR				16	9	19	38	21	8	...	61	50	111
Tuberculosis	...	...	...	...	1	...	1	1	1	...	1	3	4
Scrofula	...	...	...	...	...	2	1	...	..	...	2	1	3
Diseased Hip Joint	...	...	...	...	...	3	1	...	..	...	2	2	4
Tabes Mesenterica	...	...	...	4	2	3	...	...	...	...	6	3	9
Phthisis	..	...	...	...	...	9	29	19	6	...	34	29	63
Hydrocephalus	...	..	...	1	1	...	...	...	...	...	1	1	2
Meningitis	...	...	..	1	3	1	1	...	...	...	5	1	6
Peritonitis	...	...	...	...	1	1	5	1	1	...	3	6	9
Marasmus	...	...	...	10	1	...	...	...	...	..	7	4	11
Carried forward				51	50	34	55	33	21	3	130	117	247

TABLE OF DEATHS

WITHIN THE URBAN SANITARY DISTRICT OF GLOUCESTER IN 1884,
CONTINUED.

CAUSES OF DEATH.	AGES AT DEATH.							SEXES.		
	Under 1	1 and under 5	5 and under 20	20 and under 40	40 and under 60	60 and under 80	Over 80	Males	Fem.	Total.
Brought forward ...	51	50	34	55	33	21	3	130	117	247
Class 3.—Local Diseases.										
Order 1.—NERVOUS SYSTEM	20	8	5	5	17	35	5	44	51	95
Convulsions ...	20	7	...	...	...	...	...	15	12	27
Apoplexy ...	...	...	1	1	4	15	2	8	15	23
Paralysis ...	...	...	...	...	5	13	3	9	12	21
Epilepsy...	...	1	1	...	1	2	...	3	2	5
Softening of Brain ...	...	...	...	...	2	2	...	2	2	4
Brain Disease ...	...	...	1	...	1	2	...	1	3	4
Mania ...	...	...	...	...	1	...	...	...	1	1
Inflammation of Brain...	...	...	1	1	1	...	...	2	1	3
Tumour of Brain ...	...	...	...	1	...	...	...	...	1	1
Spinal Meningitis ...	...	...	...	...	...	1	...	1	...	1
Cerebro-spinal Disease ...	...	...	...	...	1	...	...	...	1	1
Myelitis ...	...	...	...	2	1	...	...	2	1	3
Tetanus ...	...	...	1	...	...	...	...	1	...	1
Order 2.—ORGANS OF CIRCULATION	...	...	3	3	15	25	1	30	17	47
Heart Disease ...	...	...	2	2	13	23	1	25	16	41
Fatty Degeneration of Heart ..	...	...	...	...	...	2	...	2	...	2
Aneurism ...	...	...	...	1	2	...	...	3	...	3
Embolism ...	...	...	1	...	...	...	...	...	1	1
Order 3.—RESPIRATORY ORGANS	24	23	7	6	12	22	6	48	52	100
Laryngitis ...	...	1	...	...	...	...	...	...	1	1
Atelectasis ...	1	...	...	...	...	...	...	1	...	1
Asthma ...	...	...	...	...	2	2	...	2	2	4
Bronchitis ...	18	20	4	2	4	18	6	31	41	72
Pneumonia ...	4	2	2	3	4	1	...	11	5	16
Congestion of Lungs ...	1	...	...	...	...	1	...	1	1	2
Pleurisy ...	...	...	1	1	2	...	...	2	2	4
Order 4.—DIGESTIVE ORGANS	3	2	...	4	10	8	...	16	11	27
Stomatitis ...	1	...	...	...	...	...	...	1	...	1
Cynanche Tonsillaris ...	...	...	...	...	...	1	...	...	1	1
Ulcer of Stomach ...	...	...	...	...	1	...	...	1	...	1
Enteritis...	...	1	...	1	1	...	...	1	2	3
Obstruction of Bowel ...	...	1	...	1	1	...	...	2	1	3
Other Diseases of Bowel ...	1	...	...	...	1	...	...	1	1	2
Abdominal Tumour ...	...	...	...	...	1	...	...	...	1	1
Icterus ...	1	...	...	...	...	...	...	...	1	1
Congestion of Liver ...	...	...	...	...	1	...	...	1	...	1
Disease of Liver ...	...	...	...	2	3	5	...	6	4	10
Cirrhosis of Liver ...	...	...	...	...	1	2	...	3	...	3
Carried forward ...	98	83	49	73	87	111	15	268	248	516

TABLE OF DEATHS

WITHIN THE URBAN SANITARY DISTRICT OF GLOUCESTER IN 1884,
CONTINUED.

CAUSES OF DEATH.	AGES AT DEATH.							SEXES.		
	Under 1	1 and under 5	5 and under 20	20 and under 40	40 and under 60	60 and under 80	Over 80	Males	Fem.	Total.
Brought forward ...	98	83	49	73	87	111	15	268	248	516
Class 3.—Local Diseases. (Continued)										
Order 5.—URINARY ORGANS	...	...	1	9	7	12	...	20	9	29
Diabetes ...	...	...	...	3	...	1	...	3	1	4
Bright's Disease ...	...	...	1	4	4	5	...	8	6	14
Disease of Kidney ...	...	...	...	...	1	2	...	2	1	3
Calculus (Prostatic) ...	...	...	...	1	...	1	...	2	...	2
Cystitis ...	...	...	...	...	...	1	...	1	...	1
Calculus (of Bladder) ...	...	...	...	1	1	...	...	1	1	2
Stricture of Urethra ...	...	...	...	...	1	2	...	3	...	3
Order 6.—CONNECTED WITH PARTURITION	...	1	...	4	...	...	...	1	4	5
Parturition ...	...	...	...	4	...	...	...	...	4	4
Eclampsia ...	...	1	...	...	...	...	...	1	...	1
Order 7.—PECULIAR TO WOMEN	...	...	...	1	1	1	...	...	3	3
Ovarian Disease ...	...	...	...	1	1	1	...	...	3	3
Order 8.—ORGANS OF LOCO- MOTION	...	...	1	...	...	1	...	2	...	2
Lumbar Abscess ...	...	...	...	...	...	1	...	1	...	1
Necrosis ...	...	...	1	...	...	...	...	1	...	1
Order 9.—SKIN DISEASE	1	1	...	...	...	...	...	...	2	2
Skin Disease ...	...	1	...	...	...	...	...	...	1	1
Eczema ...	1	...	...	...	...	...	...	...	1	1
Class 4.—Developmental Diseases.										
Order 1.—DISEASES OF CHILDREN	42	...	...	...	...	...	...	24	18	42
Premature Birth ...	22	...	...	...	...	...	...	11	11	22
Debility from Birth ...	15	...	...	...	...	...	...	9	6	15
Teething... ..	5	...	...	...	...	...	...	4	1	5
Order 2.—DISEASES OF NUTRITION	10	1	1	...	...	...	...	6	6	12
Atrophy ...	10	1	1	...	...	...	...	6	6	12
Order 3.—DISEASES OF AGED	...	...	...	...	...	15	27	20	22	42
Old Age ...	...	...	...	...	...	15	27	20	22	42
Class 5.—Violent Deaths.	...	1	6	4	3	1	1	11	5	16
Burns ...	...	...	3	...	...	...	...	1	2	3
Drowned ...	...	...	2	1	...	...	...	3	...	3
Accident ...	...	1	1	2	2	1	1	6	2	8
Administration of Ether ...	...	...	...	...	1	...	...	1	...	1
Overdose of Chloral Hydrate..	...	...	...	1	...	...	...	...	1	1
Not Classified.	1	...	1	2	2	...	...	3	3	6
"Natural causes"—not speci- fied or ill defined.										
TOTAL ...	152	87	59	93	100	141	43	355	320	675

TABLE OF INQUESTS
HELD IN THE
CITY OF GLOUCESTER DURING THE YEAR 1884.

*(For this list I am indebted to the courtesy of the City Coroner—
A. M. Sydney-Turner, Esq.)*

DATE.			AGE.	VERDICT.
January	7	J. W.	... 27 years	Accidental death from burns
"	7	W. C. S.	... 15 "	Ditto
"	15	J. M.	... 50 "	Administration of Ether
"	24	J. P.	... 57 "	Accidental death
"	31	H. R.	... 8 "	Inflammation of Brain—cause unknown
February	4	T. F.	... 49 "	Accidental death
"	5	R. G.	... 66 "	Ditto
"	26	A. F.	... 37 "	Overdose of Chloral Hydrate
"	29	D. B.	... 57 "	Accidental death
March	1	B. L.	... 5 months	Death accelerated by Vaccination
"	6	E. L.	... 56 years	Natural causes
April	8	L. S.	... 15 months	Accidental death
"	10	T. G.	... 70 years	Ditto
"	15	H. P.	... 66 "	Ditto
"	21	W. S.	... 53 "	Ditto
"	30	J. J.	... 43 "	Ditto
May	26	C. G.	... 50 "	Found drowned
June	8	J. B.	... 63 "	Heart disease
July	4	D. B.	... 18 "	Accidental death
"	7	T.	... 40 "	Natural causes
"	15	J. M.	... 86 "	Accidental death
August	5	A. K.	... 13 "	Natural causes
"	7	J. H.	... 45 "	Ditto
"	9	E. B.	... 55 "	Ditto
"	26	H. O.	... 32 "	Accidental death
"	30	B. P.	... 35 "	Ditto
September	2	J. L.	... 6 "	Injuries from burning
October	6	J. M.	... 36 "	Accidentally drowned
"	7	L. W.	... 5 "	Accidental death
"	11	L. H.	... 36 "	Ditto
"	20	J. T.	... 60 "	Natural causes
"	22	C. N.	... 40 "	Ditto
Nov.	11	H. M.	... 19 "	Accidental death
"	24	E. A.	... 42 "	Open verdict
"	25	L. C.	... 18 "	Accidental burns
Dec.	16	H. R.	... 12 weeks	Natural causes
"	30	A. R.	... 19 years	Accidental burns

PORT SANITARY AUTHORITY.

On February 15th in the past year I received into the Stroud Road Hospital a patient with small pox, from a barge which had arrived at the Quay from Birmingham, and on February 26th, a child who had arrived at the Quay from Stone with small pox was also admitted. Both these patients recovered, and there was no spread of the disease from them. In consequence of the prevalence of small pox in towns with which water communication is constantly going on, the Sanitary Committee authorized me to arrange with an additional Inspector to visit all boats and barges arriving at the Quay.

During the summer and autumn, correspondence took place between the Port Sanitary Authority and the Local Government Board, with reference to precautions to be taken here, and at Sharpness, in the event of vessels arriving in this port from ports in which Cholera is prevalent. The Port Sanitary Authority has been endeavouring to find a site for the erection of a Hospital for Infectious Diseases at Sharpness. Dr. Blaxall visited the site, and the remarks which he made on the subject will be found in the report of the interview which he had with the Mayor and Members of the Sanitary Committee.

I have visited Sharpness during the year and frequently inspected the Docks at Gloucester. I am happy to report that there have been no cases of Infectious Disease.

During the year the following cases of illness amongst foreign sailors were received into the Gloucester Infirmary :—

INJURIES ...	...	...	...	...	5
PNEUMONIA	...	...	...	...	2
PLEURISY	...	...	...	...	2
HÆMOPTYSIS	...	...	...	...	1
ULCERATED LEG ...	...	...	...	...	1

One death occurred from Compound Fracture of the Femur, Tibia, and Fibula.

Report of an interview between Dr. Blaxall and Dr. Davies, and the Mayor and Chairman and Vice-Chairman of the Sanitary Committee, referred to in this Report.

MR. MAYOR AND GENTLEMEN,—

By direction of the Sanitary Committee I have prepared a Report of an interview which took place on Saturday, January 3rd, 1885, between Dr. Blaxall and Dr. Davies, Inspectors of the Local Government Board, and the Mayor and the Chairman and the Vice-Chairman of the Sanitary Committee. The Town Clerk, the Surveyor, and myself were also present. Dr. Blaxall stated that he had visited Gloucester with Dr. Davies, for the purpose of enquiring, and reporting to the Local Government Board, what had been done by the Port and the Urban Sanitary Authorities, by way of preparation in the event of a visitation of Cholera to the Port and City of Gloucester, and of advising with the Authority as to the steps which ought to be taken to provide against that contingency, and also to make suggestions for checking the spread of other Infectious Diseases in the Port and City.

Dr. Blaxall's remarks may be arranged under two heads. 1.—Matters relating to the Port. 2.—Those relating to the City. Under the first head Dr. Blaxall stated that he had visited Sharpness with me on the previous day, where, in company with Captain Calway, he had inspected the proposed site for a Hospital for Infectious Diseases for that part of the Port. "I think," he said, "that it would be a mistake to build a hospital there; it is a damp spot, below flood level, and is exposed to fogs and to winds. Thus on professional grounds that spot is objectionable. Further, you (the Port Sanitary Authority) have no certain tenure of the land. It is true you may have an arrangement with the Canal Company, but they may after a time say that the Hospital is a nuisance and must be got rid of. Under these

circumstances I think it would be undesirable to build a Hospital there." He went on to remark, "I believe you have an arrangement with the Port Sanitary Authority of Bristol, by which the due isolation and cure of cases of Cholera arriving at Kingroad in Gloucester bound ships is secured. Thus you have to think of Cholera on board vessels in the Docks at Sharpness or Gloucester, and to take proper steps to prevent the introduction of the disease into the City, and thence through the country. To this end I recommend that you should be prepared to make temporary Hospital provision, by means of tents or huts, put up on a suitable site previously selected in the near vicinity of the Docks, either at Sharpness or at Gloucester, as the case may be, *away from populous places*. I feel sure that the Docks Authorities will recognise the importance of helping you in this matter, and grant you the temporary use of such convenient land as you may require. But I would impress upon you that the great desideratum is to be prepared to carry out your arrangements, at a moment's notice. With regard to cases of home Infectious Diseases (Small Pox, Scarlatina, &c.) being found on board vessels either at Sharpness or at Gloucester, in determining the best provisions to be made to deal with such cases you have to consider the amount of accommodation required, and where to provide it. As regards the first, very many vessels pay off their crews directly on arrival, so, as a rule, you have a somewhat small floating population; as to the second, Sharpness and Gloucester are sixteen miles apart. Thus, if the Port Authority provides Infectious Hospital accommodation for all its own cases, whether found at Sharpness or at Gloucester, it will be obliged to have two Hospitals, or to send infectious sick persons, up or down the canal. I would strongly recommend as an efficient, and at the same time most economical way to meet the requirements of the case, that the Port Sanitary Authority amalgamate with the Urban and Rural Authorities, and jointly make the present Hospital for Infectious Diseases in

the Stroud Road an *efficient* Hospital for the reception and treatment of infectious cases, and that the Port Sanitary Authority, provide a properly fitted steam launch (or covered boat to tow) to take cases from Sharpness to Hempstead Bridge, where they can be landed and taken by ambulance to the Hospital, without risk of spreading infection. Cases found on board vessels at Gloucester, would of course be taken at once to the Hospital."

Under the head of matters relating to the City, Dr. Blaxall said, "Should Cholera appear in the town I may mention as a principle to guide you in dealing with it, that persons suffering from Cholera will not bear the fatigue of removal to a distance, as fatigue conduces to collapse. Therefore it would be well for you to consider how you will deal with cases occurring in various parts of your City should you unhappily be called upon to do so. All measures of this kind should be thought out beforehand, so that you may act promptly and intelligently immediately occasion requires it. Meanwhile measures should be taken to insure the purity of the water supply, to improve the sewerage and house drainage, and in short to secure the cleanly condition of the town, in all these measures being guided by your Medical Officer. With regard to your Infectious Hospital, I am sorry to say it does not fulfil the objects of such a Hospital. It is not suitable for the treatment of two Infectious Diseases at the same time."

Dr. Blaxall pointed out many details in the structure of the Hospital which he considered to be faulty, but it does not appear to me to be necessary to include them in this Report, which, as I understood from the directions given to me by the Sanitary Committee, is to bring before the Sanitary Authority the general broad lines of the Inspector's remarks. On these details it will be my duty to advise the Sanitary Committee. It will be necessary, if the suggestions of Dr. Blaxall are carried out, to make important alterations in, and additions to, the Hospital in the Stroud Road. And they could be well effected if the final

advice given by the Inspector is adopted, viz., that the Urban, Port, and Rural Sanitary Authorities do combine, in the erection of a thoroughly sufficient and efficient Hospital, for the treatment of Infectious Diseases occurring in the three districts.

In drawing up this report I have had valuable assistance from shorthand notes furnished to me by Mr. Blakeway, taken during the interview between the Inspectors and gentlemen I have named as representing the Port and Urban Sanitary Authority.

I have the honour to remain,

Gentlemen,

Your obedient Servant,

JOHN P. WILTON,

*Medical Officer of Health to the
Gloucester Urban and Port Sanitary Authorities.*



